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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/925,613	08/09/2001	Attila Szepesvary	54948-315939	2976
23342 7590 06/06/2007 KILPATRICK STOCKTON LLP 1001 WEST FOURTH STREET WINSTON-SALEM, NC 27101			EXAMINER RUTTEN, JAMES D	
			ART UNIT 2192	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/925,613	SZEPESVARY ET AL.	
	Examiner	Art Unit	
	J. Derek Rutten	2192	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-3, 5, 8-13, 16-21 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5, 8-13, 16-21, and 23-27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 5/1/07 has been entered.
2. Claims 1, 8, 10-12, 16-21, and 23-25 have been amended, claims 4, 6, 7, and 22 have been canceled, and new claims 26 and 27 have been added. Claims 1-3, 5, 8-13, 16-21, and 23-27 remain pending and have been fully considered by the examiner.

Response to Arguments/Amendments

3. The amendment of claim 1 has obviated the rejection of claims 1-13 and 16-18 under 35 U.S.C. § 101. Therefore, the rejections are withdrawn.
4. In an attempt to overcome the prior rejection of claims 19-25 under 35 U.S.C. § 101, Applicants have amended claim 19 to include the following language: "A computer-readable medium encoded with computer program code." However, there does not appear to be any corresponding description of a computer-readable medium in the originally filed specification. As such, broad interpretation could be applied such that a computer-readable medium includes a wireless signal. However, wireless signals are not considered to be statutory subject matter as further detailed in a new rejection under 35 U.S.C. § 101, below.

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5. Applicants' arguments on pages 7-8, filed 5/1/07, have been fully considered but they are not persuasive.

6. Applicants' arguments fail to comply with 37 CFR 1.111(b) because they amount to a general allegation that the claims define a patentable invention without specifically pointing out how the language of the claims patentably distinguishes them from the references.

Specifically, Applicants essentially argue that the prior art of reference US Patent 6,717,593 to Jennings does not describe scanning and parsing (see page 8 paragraph 1). However, the 11/1/06 office action cites Jennings Fig. 16 and column 7 lines 35-52 in support of these limitations. This section of Jennings discloses obtaining a document and parsing it using tokens. As supported by newly cited "Compilers: Principles, Techniques, and Tools" by Aho, the transformation from a source document to tokens inherently requires *scanning* (see section 1.2 on pages 4-10, especially "Lexical analysis" on page 5), since tokens do not exist without scanning the source document. Further, Jennings explicitly discloses parsing the tokens in order to identify UI objects (see column 7 lines 53-60 in addition to previously cited column 7 lines 42-44). Applicant has not pointed out how Jennings could utilize tokens if they were not generated through scanning, or how the objects could be displayed without being identified through parsing. Therefore, Applicants' arguments are not persuasive.

7. Further arguments presented on page 8, filed 5/1/07 are based upon previous arguments as addressed above, and are likewise not persuasive.

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Claim Objections

8. Claims 1 and 17 are objected to because of the following informalities: The claims do not comply with 37 CFR 1.121.

Applicants' submission of claim 1 on 7/31/06 (see line 7) reads:

scanning any of (i) the markup-language stream...

However, the 5/1/07 submission (see line 7) reads:

scanning ~~any~~ of the (i) the markup-language stream...

In the 5/1/07 submission, there is an additional word "the" after the word "scanning" which has not been underlined but does not appear in the previous version of the claim. This does not comply with 37 CFR 1.121(c)(2). This appears to be a simple typo and the claim will be interpreted without the additional word. Appropriate correction is required.

Claim 17 has presently been submitted with the designation "currently amended."

However, there are no amendment markings, and this version of the claim appears to be identical to the 7/31/06 version of the claim. This does not comply with 37 CFR 1.121(c)(2).

Clarification is required.

Claim Rejections - 35 USC § 101

9. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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10. Claims 19-21, 23-25 and 27 are rejected under 35 U.S.C. 101 because the claimed invention is not tangible. Claim 19 is drawn to "a computer-readable medium encoded with computer program objects." However, the originally filed specification does not appear to provide any discussion of a computer-readable medium. Therefore, the medium is not limited to a tangible embodiment, and could be interpreted to include such non-tangible media as wireless transmission media, or an electro-magnetic signal. Claims that recite nothing but the physical characteristics of a form of energy, such as a frequency, voltage, or the strength of a magnetic field, define energy or magnetism, per se, and as such are nonstatutory natural phenomena. O'Reilly, 56 U.S. (15 How.) at 112-14. Moreover, it does not appear that a claim reciting a signal encoded with functional descriptive material falls within any of the categories of patentable subject matter set forth in Sec. 101. First, a claimed signal is clearly not a "process" under § 101 because it is not a series of steps. A claimed signal has no physical structure, does not itself perform any useful, concrete and tangible result and, thus, does not fit within the definition of a machine. A claimed signal is not matter, but a form of energy, and therefore is not a composition of matter. A product is a tangible physical article or object, some form of matter, which a signal is not. In contrast, a tangibly claimed computer-readable medium (e.g. magnetic or optical disk) encoded with a data structure defines structural and functional interrelationships between the data structure and the computer software and hardware components which permit the data structure's functionality to be realized, and is thus statutory. Claims 20-21, 23-25 and 27 are dependent upon claim 19 but do not make up for the deficiencies of the parent claim and are likewise rejected. For further information, see Official Gazette, Nov. 22, 2005, 1300 OG

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142, "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility", which can be found online at

<<http://www.uspto.gov/web/offices/com/sol/og/2005/week47/patgupa.htm>>. It should be noted that claim amendments must be supported by the originally filed specification.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

12. Claims 19-21, 23-25 and 27 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claims contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventors, at the time the application was filed, had possession of the claimed invention. Claim 19 includes the limitation "A computer-readable medium encoded with computer program code." However, no corresponding description of any such medium was found in the originally filed specification. Further, Applicants' have not specifically pointed out where such descriptions could be found in the originally filed specification. Claims 20, 21, 23-25 and 27 are dependent upon claim 19 and are rejected for the same reason.

13. The following is a quotation of the second paragraph of 35 U.S.C. 112:

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The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

14. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

15. Claim 8 recites the limitation "the method of claim 7" in line 1. There is insufficient antecedent basis for this limitation in the claim. For the purpose of further examination, this limitation will instead be interpreted as --the method of claim 1--.

Claim Rejections - 35 USC § 103

16. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

17. Claims 1-3, 5, 8-13, 16-21, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,717,593 to Jennings (hereinafter "Jennings"), in view of "Compilers: Principles, Techniques, and Tools" by Aho et al. (hereinafter "Aho").

In regard to claim 1, Jennings teaches that the interactor parses the description documents of an interface into elements and reflects them in the object model to form an

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instance representing the interface, downloads the objects corresponding to the reflected elements registers their interfaces in the object model instance to make them accessible by the elements, and invokes execution of each downloaded object with the corresponding element to render the element. (E.g. see Abstract and associated text). Jennings discloses the method covering the steps of a method for identifying user interface (UI) objects in a markup-language stream, the method comprising the steps of:

receiving a predefined grammar for a particular application; See column 8 lines 53-58 for a discussion of an XML parser which parses a document into XML elements. Note that a predefined grammar is inherent in such parsing, otherwise the parser would not know be able to recognize an XML element. Jennings also describes grammars for particular applications. See column 2 lines 53-57.

...a parser computer program based on the predefined grammar... E.g. see FIG. 7 step 401 and associated text, e.g. col. 7:35-65.

scanning (i) the markup-language stream or (ii) a corresponding document object model (DOM) with the parser computer program to generate tokens; E.g. see FIG. 16 and associated text, e.g. see col. 7:35-52.

parsing the tokens with the parser computer program to identify at least one UI object in a portion of the particular application e.g. see col. 7:42-44, also see col. 7:57-60, e.g. “renders the object.” Noted that if the UI object was not identified, it could not be rendered and displayed.

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and outputting the portion of the particular application. See col. 7 line 44, e.g.

“reflects each token into the DOM.”

Jennings does not expressly disclose *automatically generating* a parser computer program based on the predefined grammar using an automated-parser generator tool.

However, in an analogous environment, Aho teaches the well known method of using a parser generator tool to automatically generate a parser based on a predefined grammar.

See Section 4.9, especially Fig. 4.55:

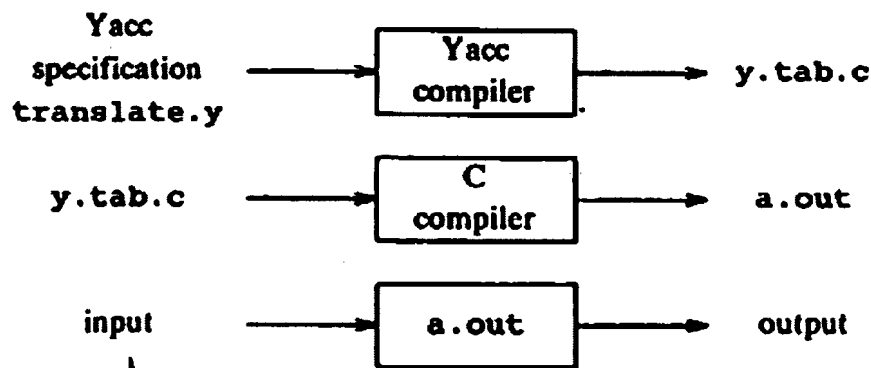


Fig. 4.55. Creating an input/output translator with Yacc.

Note that the grammar is represented as the “Yacc specification” and the parser is represented as “a.out”. It is also noted that Applicant’s originally filed specification also describes this “well known parser generator” in paragraph 2 on page 10. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Aho’s teaching of a parser generator with Jennings parser. One of ordinary skill would have been motivated to use a well known tool to facilitate the construction of a parser in

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order to determine if source code is syntactically well formed (See Aho page 159, bullet two, and the 1st paragraph in section 4.9 on page 257).

As per claim 2, the rejection of claim 1 is incorporated and further Jennings teaches:

“wherein said markup-language stream drives a markup-language-based browser application, and wherein the scanning step includes scanning the DOM generated by a browser that displays that application.” (E.g. see col. 7:35-52).

As per claim 3, the rejection of claim 1 is incorporated and further Jennings teaches: “wherein the scanning step includes identifying elements of the DOM by traversal thereof.” (E.g. see FIG. 16 and associated text, e.g. see col. 7:53-57).

As per claim 5, the rejection of claim 3 is incorporated and further Jennings teaches: “wherein the scanning step includes generating one or more tokens for each scanned DOM element.” (E.g. see col. 7: 7:42-45).

As per claim 8, the rejection of claim 1 is incorporated. Jennings further teaches: “wherein said UI objects comprises one of a user input field (E.g. see col. 7:31-32, text entry and see FIG. 15, block “Password” and associated text), text field (E.g. see col. 7:31-32, text entry and see FIG. 15, block “Text” and associated text), metatag (E.g. see

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FIG. 4 and associated text, e.g. see col. 5:47-50, and col. 7:45-50), unprintable markup-language (E.g. see FIG. 15, block “Hidden” and associated text), or an in-line image (E.g. col. 7:35-40 and see FIG. 15, block “Image” and associated text).”

As per claim 9, the rejection of claim 1 is incorporated and further Jennings teaches: “wherein the scanning and parsing steps are adapted to identify UI objects that correspond to elements displayed in the markup-language application.” (E.g. see FIG. 16 and associated text, e.g. see col. 7:35-52).

As per claim 10, the rejection of claim 1 is incorporated and further Jennings teaches: “grouping the tokens into syntactic structures that identify items displayed by the particular application.” (E.g. see col. 7:20-25).

As per claim 11, the rejection of claim 10 is incorporated and further Jennings teaches: “wherein said step of grouping comprises identifying similarly formatted markup-language elements based on their markup-language attributes such as classname, font size, style, tag color, and size.” (E.g. see col. 5:17-29, style sheet).

As per claim 12, the rejection of claim 1 is incorporated and further Jennings teaches: “wherein said at least one object comprises a name (E.g. see col. 6:1-3), content

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(E.g. see col. 6:1-3, value), a shape (E.g. see col. 5:64), or a location (E.g. see col. 6:3-5).”

In regard to claim 13, the above rejection of claim 1 is incorporated. All further limitations have been addressed in the above rejection of claim 1.

In regard to claim 16, the above rejection of claim 1 is incorporated. Jennings does not expressly disclose a LALR(1) parser. However, Aho teaches that Yacc is a LALR parser. See paragraph 1 in section 4.9 on page 257.

In regard to claim 17, the above rejection of claim 1 is incorporated. Jennings does not expressly disclose a LR(1) parser. However, Aho teaches that Yacc is a LR parser. See paragraph 1 on page 216.

As per claim 18, the rejection of claim 1 is incorporated and further Jennings teaches: “wherein the markup language is any of HTML,” (E.g. see col. 7:16-20).

As per Claim 19, Jennings discloses a computer readable medium encoded with computer program code. See column 3 lines 22-30, e.g. “computer-readable medium containing instructions.” All further limitations have been addressed in the above rejection of claim 1.

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As per claim 20, the rejection of claim 19 is incorporated and further Jennings teaches: “wherein the list of UI objects corresponds to elements displayed by the markup-language DOM.” (E.g. see FIG. 16 and associated text, e.g. see col. 7:53-65).

As per claim 21, the rejection of claim 20 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 12.

As per claim 23, the rejection of claim 19 is incorporated and further Jennings teaches: “wherein said tokens are interpreted according to the predefined grammar to identify and distinguish among UI objects of a markup-language application's display.” (E.g. see FIG. 16 and associated text, e.g. see col. 7:35-65).

As per claim 24, the rejection of claim 19 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 8.

As per claim 25, the rejection of claim 19 is incorporated and is rejected under the same reason set forth in connection of the rejection of claim 18.

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18. Claims 26 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jennings and Aho as applied to claims 1 and 19 above, and further in view of U.S. Patent 5,933,140 to Strahorn et al. (hereinafter "Strahorn").

In regard to claim 26, the above rejection of claim 1 is incorporated. Jennings and Aho do not expressly disclose: *providing context based help based at least in part on the portion of the particular application*. However, Strahorn teaches context-based help based upon a particular portion of the application. See Fig. 3 and column 3 lines 12-14 and column 4 lines 38-42. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Strahorn's context based help with Jennings' parser in order to overcome the limitations of conventional help facilities in a web page as suggested by Strahorn (see column 1 lines 50-53).

In regard to claim 27, the above rejection of claim 19 is incorporated. All further limitations have been addressed in the above rejection of claim 26.

Conclusion


19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Derek Rutten whose telephone number is (571)272-3703. The examiner can normally be reached on M-F 7:00-3:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

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supervisor, Tuan Q. Dam can be reached on (571)272-3695. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



TUAN DAM
SUPERVISORY PATENT EXAMINER

jdr